



State Bike and Pedestrian Plan Best Practices—District 11 Examples

SR-15 Commuter Bikeway



The SR-15 Commuter Bikeway is currently under construction and will provide a safe and direct bike route connecting the communities in the Mid-City area of the City of San Diego with the major retail, commercial, education, and entertainment destinations in the city's Mission Valley area. The bikeway, which will be separated from vehicle traffic, will extend from Adams Avenue along a one-mile segment of northbound SR-15 to Camino Del Rio South.

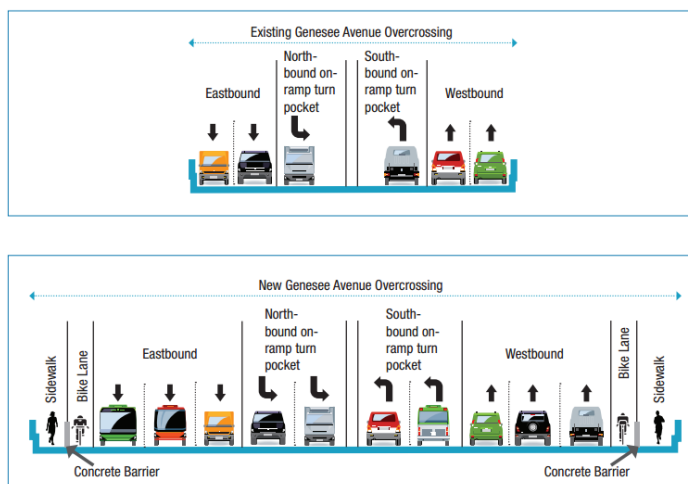
The bikeway will be 12 feet wide, paved, and striped to provide two-way travel. It will be separated from the freeway shoulder by a concrete barrier. There will be locations where wider paved sections will be provided to accommodate resting or passing bike riders. Lighting will be provided along the bikeway.

Currently, the only bike route access between Mid-City and Mission Valley are Fairmount Avenue, which has high speed conflicts, and Texas Street, which has high speed conflicts, and a very steep, sustained grade. Neither route provides a convenient link for bicycle commuters between Mid-City and Mission Valley and both routes result in several miles of additional travel. This

project is a collaboration between Caltrans District 11, the San Diego Association of Governments (SANDAG), and the City of San Diego. The SR-15 Commuter Bikeway is scheduled to open in early summer 2017.

<http://www.keepsandiegomoving.com/RegionalBikeProjects/sr15.aspx>

I-5/Genesee Avenue Interchange Project



The Interstate 5 (I-5)/Genesee Avenue Interchange Project will replace the existing six lane Genesee Avenue overpass with a ten lane bridge that will accommodate current and future traffic demands in the job-intensive community. The new overcrossing will include bike lanes and sidewalks – features which were not included on the old structure. Along with the replacement of the overcrossing, the project will also construct a new, separated bike path. By providing links to transportation, employment centers, hospitals, and UC San Diego, the project will greatly

improve the movement of people and goods through the area. This project is a collaboration between the FHWA, Caltrans District 11, SANDAG, The City of San Diego, and U.C. San Diego.

Key features of the I-5/Genesee Avenue Interchange Project include:

- Replacing the existing overcrossing at Genesee Avenue with an improved bridge that accommodates additional vehicle lanes, sidewalks, and bicycle routes;
- Constructing approximately three miles of bicycle paths in both directions from Roselle Street to Voigt Drive.
- A new bicycle and pedestrian overcrossing will carry active transportation traffic over Genesee Avenue providing a separate, comfortable path of travel which avoids an at-grade crossing.
- A new separated bike path on the west side of I-5 will connect the Sorrento Valley COASTER Station and the UC San Diego area.
- Currently, cyclists must use the I-5 freeway shoulder to travel from Sorrento Valley to UC San Diego.

Existing Condition



Future Bike Path



<http://www.keepsandiegomoving.com/I-5-Corridor/I-5-genesee-intro.aspx>

Build NCC | Bike, Pedestrian, and Community Enhancements

Build NCC is the first phase of construction of the Interstate 5 (I-5) North Coast Corridor (NCC) Program in the cities of Solana Beach, Encinitas, and Carlsbad. Build NCC is part of a \$6 billion comprehensive set of transportation, environmental, and coastal access projects to improve the quality of life for residents, create a stronger local and regional economy for the future, and enhance the coastal environment over the next 40 years. The project recently started construction on the initial projects. This project is a collaboration between Caltrans District 11, SANDAG, local and resource agencies, the California Coastal Commission, and the communities' stakeholders.

Linking local and regional bike and pedestrian trails to improve coastal access is a key component of Build NCC, which includes projects aimed at improving east-west/north-south connectivity for pedestrians and people on bikes.

Some improvements included under Build NCC include:

- Building the 10-mile North Coast Bike Trail, which includes new east/west and north/-south bike and pedestrian connections from Solana Beach to Encinitas and a new trail bridge suspended from the San Elijo Lagoon highway bridge.
- A new bicycle and pedestrian bridge over Batiquitos Lagoon.
- Adding bike/pedestrian paths at the Interstate 5 interchanges at Encinitas Boulevard and Santa Fe Drive.
- Adding a new pedestrian undercrossing at the south end of the San Elijo Lagoon.
- Improve access for people walking and biking at the Chesterfield Drive crossing.

http://www.keepsandiegomoving.com/BuildNCC/buildncc_bike.aspx

Project Features



North Coast Bike Trail

Addition of a 10-mile bike trail that will expand the regional bike and pedestrian network.

Status: Construction late 2016



Chesterfield Dr. Rail Crossing Improvements

Improvements to rail crossing at Chesterfield Drive to improve access for people walking and biking.

Status: Construction begins late 2016



Santa Fe Dr. Ped/Bike Improvements

Addition of dedicated bike and pedestrian paths at the Interstate 5 interchange at Santa Fe Dr.

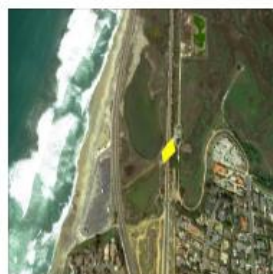
Status: Construction begins late 2016



Encinitas Blvd. Ped/Bike Improvements

Addition of dedicated bike and pedestrian paths at the Interstate 5 interchange at Encinitas Blvd.

Status: Construction begins late 2016



Solana Beach/San Elijo Rail Pedestrian Undercrossing

Addition of a pedestrian rail undercrossing at the southern end of the San Elijo Lagoon.

Status: Construction begins late 2016



San Elijo Lagoon Bike/Ped Bridge

Addition of a bike/ped bridge suspended from the new highway bridge at Manchester Avenue for north-south connectivity.

Status: Construction late 2016



Batiquitos Lagoon Bike/Ped Bridge

Addition of a bike/ped bridge immediately west of highway bridge for north-south connectivity.

Status: Construction begins 2017

Exclusive Bicycle Signal Phase

An additional project feature of the Build NCC project is the installation of an exclusive bicycle signal on WB Manchester Avenue that is intended to reduce conflicts between motorists and bicyclists. A typical bike lane designed to the left of a dual right turn lane approaching the SB I-5 ramps could not be comfortably designed due to lack of available right-of-way and environmental constraints. The condition would have required bicyclists to weave across high-speed vehicular traffic to access the through bike lane. District 11 Design, Traffic Operations, and Planning staff worked together to develop a bike lane to the right of the dual right turns which will be controlled by an exclusive bicycle signal phase at the intersection which will hold right-turning vehicles until their phase is activated.

Shared Lane Markings (Sharrows) Implementation and District Guidelines

Many urban freeway interfaces with local streets are in constrained rights-of-ways. These location-types often lack the available cross-section to implement dedicated bicycling facilities. District 11 Traffic Operations and Planning staff have worked to develop a guideline for the use and implementation of sharrows in District ROW. District staff are implementing sharrows in concert with BIKES MAY USE FULL LANE signs in locations that are deemed appropriate.

Some features of the District Guidelines on Sharrows:

- Consider sharrows when constrained ROW does not allow for implementation of higher-order bikeways.
- Sharrows will be considered on roadways with lane widths less than 15'. Bike lanes will be considered on roads wider than 14' depending on conditions.

- Sharrows are deployed along with “BIKES MAY USE FULL LANE” signs.



[Blank-out No-Turn-on-Red signs at SR-56 Bike Path and Black Mountain Rd.](#)

In a collaboration between the City of San Diego and Caltrans District 11 a blank-out no turn on red signal was installed at the intersection of SR-56 at Black Mountain Road where the SR-56 Bike Path interfaces with a regional bikeway, freeway ramps, and the local road. This project was initiated to improve bicyclist and pedestrian safety at the intersection by controlling right-turning vehicles using a “blank out, no turn on red” traffic signal. Here’s how it works – bicyclists or pedestrians press the crossing button and when the pedestrian signal-head indicates it’s their turn to cross, an additional signal for motorists illuminates showing a crossed-out red right-turn arrow and alerting drivers that a right turn on red is prohibited. If a cyclist or

pedestrian doesn't push the button, then the signal doesn't illuminate and drivers are free to make the right turn after first coming to a complete stop.

The "blank out, no turn on red" traffic signal project cost \$60,000 and was a cost-savings alternative to the original consideration for a grade-separation improvement under Black Mountain Road. The plan now calls for loop detectors to be installed on the approach to the intersection so bicyclists do not need to dismount in order to be detected and activate the signal. This technology is being included in future freeway projects with nearby bike and pedestrian access from adjacent paths or across ramps.

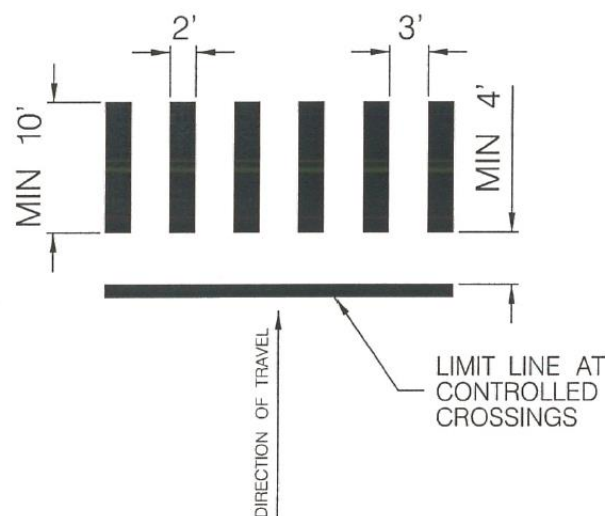


District Continental Crosswalk Guidance

District 11 has adopted the use of high-visibility continental crosswalks on all types of future work to be performed in the District. The District collaborated with and follows the lead of the City of San Diego's Transportation and Stormwater Division's crosswalk standard. The decision to implement continental crosswalks is based on research data including the following from the FHWA which indicates that continental crosswalks are seen earlier and have a better compliance rate among motorists:

<http://www.fhwa.dot.gov/publications/research/safety/pedbike/10067/>

TYPICAL CONTINENTAL CROSSWALK MARKINGS



Bicyclist and Pedestrian Advisory Committee

In 2015 District 11 established a Bicyclist and Pedestrian Advisory Committee (BPAC). The BPAC is intended to be a transparent relationship between District management and staff and San Diego and Imperial County bicyclist and pedestrian stakeholders. The meetings to date include information-sharing on the part of District staff regarding projects and issues that may affect bicyclists and pedestrians within District 11, and on the part of active transportation users by providing input and feedback to District staff. The Committee's primary role is to serve as a conduit to establish a better line of communication between Caltrans District 11 and bicyclist and pedestrian stakeholders in the District. The District 11 BPAC meets quarterly.

Rumble Strip District Guidance

District 11 Traffic Operations, Maintenance, and Planning staff have been involved in discussions regarding rumble strips and bicyclist sensitivities to them. Some discussions have been initiated by bicyclists' complaints and the problems that rumble strips can present to bicyclists. Rumble strip projects are being implemented due to mandates from FHWA and Caltrans. The District is in a position to preserve motorist and bicyclist safety and determining a pragmatic solution to the rumble strip issue was implicit to develop within the District.

District staff researched rumble strip best practices as they relate to bicyclists and found FHWA and League of American Bicyclists (LAB) guidance that prescribes best practices for installing rumble strips on roadways where bicyclists are present. The LAB guidance is available at the following link:

<http://www.bikeleague.org/content/rumble-strips-problems-and-policies>

Some features of the District 11 Rumble Strip Guidance:

- No Rumble Strips on roads with outside shoulders that are less than 4' wide.
 - Rumble *Stripes* should be considered and favored adjacent to Class II bike lanes and in areas with heavy bicyclist usage.
 - Rumble strips/strips should include 12' minimum gaps every 40' or 60' along roads where cyclists are anticipated to ride.
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Green Paint: I-8/Lake Jennings Park Rd.

A recent permit project installed green paint in bike lanes adjacent to the freeway ramp conflict zones along Lake Jennings Park Rd. at the I-8 interchange. The green paint is intended to bring awareness of potential conflicts between bicyclists and motorists follows the NACTO Urban Bikeway Design Guide. This is the first green paint project in District 11 and is a collaboration between the County of San Diego and District 11.



For more information regarding any of these projects and policies contact Seth Cutter, District 11 Bicycle and Pedestrian Coordinator: 619-688-2597, seth.cutter@dot.ca.gov
